

Application for a Permit to Construct or Demolish - SEPTIC

This form is authorized under subsection 8(1.1) of the Building Code Act, 1992

For use by Principal Authority	
Application number: A19-	Permit #:
Date received:	Roll number: 4341-

Application submitted to: TOWNSHIP OF SPRINGWATER
(Name of municipality, upper-tier municipality, board of health or conservation authority.)

A. Project information		
Building number, street name	Unit number	Lot/con.
City/Town (Municipality)	Postal code	Plan number/other description
Project value est.\$	Area of work (m ²)	

B. Purpose of application	
<input type="checkbox"/> New Construction <input type="checkbox"/> Addition to an existing building <input type="checkbox"/> Alteration/repair <input type="checkbox"/> Demolition <input type="checkbox"/> Conditional Permit	
Proposed use of building	Current use of building
Description of proposed work	

C. Applicant			
Applicant is: <input type="checkbox"/> Owner or <input type="checkbox"/> Authorized agent of owner (letter of agent required)			
Last name	First name	Corporation or partnership	
Street Address		Unit number	Lot/con.
City/Town (Municipality)	Province	Postal Code	E-mail
Telephone number (include area code) Ext.	Fax (include area code)	Cell number (include area code)	

D. Owner (if different from applicant)			
Last name	First name	Corporation or partnership	
Street Address		Unit number	Lot/con.
City/Town (Municipality)	Province	Postal Code	E-mail
Telephone number (include area code) Ext.	Fax (include area code)	Cell number (include area code)	

FOR OFFICE USE ONLY	
Township of Springwater Septic Design Reviewed	
_____ Signature	
_____ Date	<div style="border: 1px solid black; padding: 5px; display: inline-block;">BU-418-3/17</div>

Application for a Permit to Construct or Demolish - SEPTIC (cont'd.)

E. Builder (optional)				
Last name	First name	Corporation or partnership		
Street Address			Unit number	Lot/con.
City/Town (Municipality)	Province	Postal Code	E-mail	
Telephone number (include area code) Ext.	Fax (include area code)		Cell number (include area code)	
F. Tarion Warranty Corporation (Ontario New Home Warranty Program)				
i. Is proposed construction for a new home as defined in the <i>Ontario New Home Warranties Plan Act</i> ? If no, go to - Section G.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
ii. Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iii. If yes to (ii) provide registration number(s): _____				
G. Required Schedules				
i. Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.				
ii. Attach Schedule 2 where application is to construct on-site, install or repair a sewage system.				
H. Completeness and compliance with applicable law.				
i. This application meets all the requirements of clauses 1.3.1.3(5) (a) to (d) of Division C of the Building Code. (The application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and all required schedules and, all required schedules are submitted.)			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the <i>Building Code Act, 1992</i> , to be paid when the application is made.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
ii. This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> .			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iii. This application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> which enables the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iv. The proposed building, construction or demolition will not contravene any applicable law.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
I. Declaration of applicant				
<p>I, _____ certify that:</p> <p style="text-align: center;">(print name)</p> <p>1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge.</p> <p>2. If the owner is a corporation or partnership, I have authority to bind the corporation or partnership.</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">Date Signature of Applicant</p>				
<p>Personal information contained in this form and schedules is collected under the authority of sub-Section 8(1.1) of the <i>Building Code Act, 1992</i>, and will be used in the administration and enforcement of the <i>Building Code Act, 1992</i>. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing, 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.</p>				

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project information			
Building number, street name		Unit number	Lot/con.
City/Town (Municipality)	Postal code	Plan number/other description	
B. Individual who reviews and takes responsibility for design activities			
Name		Firm	
Street Address		Unit number	Lot/con.
City/Town (Municipality)	Province	Postal Code	E-mail
Telephone number (include area code) Ext.	Fax (include area code)		Cell number (include area code)
C. Design activities undertaken by individual identified in - Section B [Building Code Table 3.5.3.1.(1) of Division C]			
<input type="checkbox"/> House	<input type="checkbox"/> HVAC - House	<input type="checkbox"/> Building Structural	
<input type="checkbox"/> Small Buildings	<input type="checkbox"/> Building Services	<input type="checkbox"/> Plumbing - House	
<input type="checkbox"/> Large Buildings	<input type="checkbox"/> Detection, Lighting and Power	<input type="checkbox"/> Plumbing - All Buildings	
<input type="checkbox"/> Complex Buildings	<input type="checkbox"/> Fire Protection	<input type="checkbox"/> On-site Sewage Systems	
Description of designer's work			
D. Declaration of Designer			
I, _____ declare that (choose one as appropriate): (print name)			
<input type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4 of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.			
Individual BCIN: _____			
Firm BCIN: _____			
<input type="checkbox"/> I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under subsection 3.2.5 of Division C, of the Building Code.			
Individual BCIN: _____			
Basis for exemption from registration: _____			
<input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code.			
Basis for exemption from registration and qualification: _____			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge.			
2. I have authority to bind the corporation or partnership (if applicable).			
_____ Date		_____ Signature of Designer	

Note:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d). Of Division C, Article 3.2.5.1 of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4 and 3.2.5 of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Schedule 2: Sewage System Installer Information

A. Project information			
Building number, street name		Unit number	Lot/con.
City/Town (Municipality)	Postal code	Plan number/other description	
B. Sewage system installer			
Is the installer of the sewage system engaged in the business of constructing on-site, installing, repairing, servicing, cleaning or emptying sewage systems, in accordance with Building Code Article 3.3.1.1, Division C?			
<input type="checkbox"/> Yes (Continue to Section C) <input type="checkbox"/> No (Continue to Section E) <input type="checkbox"/> Installer unknown at time of application (Continue to Section E)			
C. Registered install information (where answer to B is "Yes")			
Name		BCIN	
Street Address		Unit number	Lot/con.
City/Town (Municipality)	Province	Postal Code	E-mail
Telephone number (include area code) Ext.	Fax (include area code)		Cell number (include area code)
D. Qualified supervisor information (where answer to Section B is "Yes")			
Name of qualified supervisor(s)		Building Code Identification Number (BCIN)	
E. Declaration of applicant			
I, _____ declare that: <div style="text-align: center;">(print name)</div>			
<input type="checkbox"/> I am the applicant for the permit to construct the sewage system. If the installer is unknown at time of application, I shall submit a new Schedule 2 prior to construction when the installer is known;			
OR			
<input type="checkbox"/> I am the holder of the permit to construct the sewage system, and am submitting a new Schedule 2 now that the installer is known.			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge. 2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.			
_____		_____	
Date		Signature of applicant	

Schedule 2A: Sewage System Information

A. Proposed sewage system															
<p>System is for: <input type="checkbox"/> Residential Use <input type="checkbox"/> Commercial or Industrial or Agricultural Use</p> <p>The installation is: <input type="checkbox"/> New <input type="checkbox"/> Replacement <input type="checkbox"/> Alteration <input type="checkbox"/> Repair</p>															
<p>Test Holes are generally required for all new or replacement Class 4 septic system applications; minimum size to be 3 feet (.9 meters) wide and 6 feet (1.8 meters) deep. Must be stepped or sloped.</p>					<p>Are test holes ready?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>										
B. Type of proposed sewage system															
<p>1. Trench 2. Filter 3. Distribution 4. Other, please specify: _____</p> <p style="text-align: center; color: blue;">Please complete the calculations required for the type of bed being installed.</p>															
C. Classification of Treatment Unit: II <input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/>															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;">Manufacturer</th> <th style="width: 30%;">Model</th> <th style="width: 40%;">Attach documentation to application</th> </tr> <tr> <td> </td> <td> </td> <td><input type="checkbox"/> CAN/BNQ 3680-600</td> </tr> <tr> <td> </td> <td> </td> <td><input type="checkbox"/> BMEC</td> </tr> </table>							Manufacturer	Model	Attach documentation to application			<input type="checkbox"/> CAN/BNQ 3680-600			<input type="checkbox"/> BMEC
Manufacturer	Model	Attach documentation to application													
		<input type="checkbox"/> CAN/BNQ 3680-600													
		<input type="checkbox"/> BMEC													
D. Design flow calculations - single dwelling units (separate calculations required for multi-residential and non-residential structures)															
(include rough-in plumbing, eg. for future basement bathroom)															
Description of Fixture	Number of new/proposed bathrooms/fixtures	x	Fixture Units	=	Fixture Unit Count	Notes									
bathroom group eg. 1 ea toilet, sink, bathtub/1-head shower or Separately as:		x	6	=											
lavatory/bathroom sink		x	1.5	=											
toilet		x	4	=											
Tub or 1-head shower		x	1.5	=											
bidet		x	1	=											
dishwasher		x	1	=											
laundry tub		x	1.5	=											
sink, bar sink or kitchen sink (ea)		x	1.5	=											
washing machine		x	1.5	=											
Other - specify:		x		=											
Total Fixture Units:						0									
Total Fixture Units over 20:															
Record finished floor area - in square meters - for the following:															
1st Floor	2nd Floor	3rd Floor	Loft	Other ? please identify:	Other - M²	Total									
<p>Will this septic system serve more than one dwelling unit? (eg. basement apt, granny flat etc.) <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Please specify: </p>															

Schedule 2A: Sewage System Information - cont'd.

E. Design Flow Calculations for Dwellings (separate calculation required for non-residential structures)

Where:

A= bedroom flow (1-5 bedrooms) B= bedroom flow (over 5 bedrooms) C= Living area flow D= Fixture units over 50.

Bedroom Flow (A)	Select Number of Bedrooms	Volume (in litres)		Total Flow
	1 Bedroom	750	=	
	2 Bedrooms	1100	=	
	3 Bedrooms	1600	=	
	4 Bedrooms	2000	=	
	5 Bedrooms	2500	=	
Enter applicable data			TOTAL (A)	

Bedroom Flow (B)	>5 Bedrooms?	# of bedrooms >5		Volume (in litres)		Total Flow
	<input type="checkbox"/> Yes <input type="checkbox"/> No		x	500 each	=	
TOTAL (B)						

Living Area Flow(C)	Total Living area in m ² :				0
Size of Living Area (in m2)	number of 10m2-increments over 200 m2		Volume (in litres)		Total Flow
0 - 200 m2		x	0	=	
201 - 400 m2		x	100	=	
401 - 600 m2		x	75	=	
> 600 m2		x	50	=	
TOTAL (C)					

Fixture Units (D)	Number of fixture units over 20 (from pg. 5)	=		x	50 litres/ fixture unit	=	Total Flow
TOTAL (D)							

F. Design Flow (eg. "Q") (Number of litres per day - insert totals for A and B or C or D from Section E (above).

Q = A + (the highest of) B or C or D

Q = (A) + (B or C or D)

Q = Litres per day

G. Septic Tank Size (working capacity) for Class 4 System New Existing Replacement

Complete applicable calculations				Working Capacity	
				Minimum	Proposed
1 Residential (3600L) minimum	2	x	Q (from Section F)	0	
2 Non-Residential (3600L) minimum	3	x	Q (from Section F)	0	

Schedule 2A: Sewage System Information - cont'd.

H. Percolation Rate of Design Soil (T)

Percolation Rate of Design Soil T = <input style="width: 80px;" type="text"/> min/cm Soil is: <input type="checkbox"/> Native <input type="checkbox"/> Imported	Percolation Rate of Mantle Sand T = <input style="width: 80px;" type="text"/> min/cm Soil is: <input type="checkbox"/> Native <input type="checkbox"/> Imported	SEE: <input type="checkbox"/> Laboratory Analysis <input type="checkbox"/> Laboratory Report Attached
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NOTE: The Township of Springwater may require documentation by a certified soil technician on proposed imported soils to confirm the percolation rate "T" time), or the suitability of filter sand or imported fill.

I. Percolation Rate and Classification of Native Soil

- Laboratory Analysis (report attached)
 Test on site (Test Hole)
 Estimated (Unified System)

Test Hole #1		
Soil Description	Depth (in meters)	Township Confirmation
eg. Topsoil	0m - .3m	

Test Hole #2		
Soil Description	Depth (in meters)	Township Confirmation
eg. Topsoil	0m - .28m	

Depth to groundwater (or T>50) _____

Depth to groundwater (or T>50) _____

Notes:

Notes:

ESTIMATED PERCOLATION RATE OF NATIVE SOIL (for example only)			
✓	(in min/cm)	Visual Appearance	Soil Type (Unified Soil Classification System)
<input type="checkbox"/>	4 - 12	silty gravels, gravel-sand-silt	GM Permeable to medium permeable, depending on amount of silt
<input type="checkbox"/>	12 - 50	clay-like gravel, gravel-sand-clay mixtures	GC Important to estimate amount of silt and clay
<input type="checkbox"/>	2 - 12	gravel, sand mix, minimal fine	SW Medium permeability
<input type="checkbox"/>	2 - 8	gravelly sand, uniform, minimal fine	SP Medium permeability
<input type="checkbox"/>	8 - 20	silty sand/loam mix	SM Medium to low permeability
<input type="checkbox"/>	12 - 50	clay-like sand/silty loam mix	SC Medium to low permeability depending on amount of clay
<input type="checkbox"/>	20 - 50	inorganic silts/clay-like silts	ML Medium to low permeability

NOTE: Filter bed can only be installed in the ground when "T" time of native soil does not exceed 15 min/cm. **8.7.4.2.(2)**

J. Water Supply for Lot

Water supply is existing

Proposed supply is:

Drilled Well
 Municipal Well
 Other, please specify: _____

Are other wells located within 30 m of proposed septic tank/distribution pipe? Yes No

If yes, be sure to include location and setback on site plan.

Additional appliances (check as applicable):

- Water softener Does it backwash into septic? Yes No
 Water Filter Does it backwash into septic? Yes No

Schedule 2C: Class 4 Sewage System Calculations

A. Type of bed and proposed grade

Proposed system to be:

1. **Absorption Trench**

Standard
 with treatment unit as described in Table 8.6.2.2

2. **Filter Bed where Q**

≤ 3000 litres per day
 >3000 litres per day
 With treatment unit as described in Table 8.6.2.2

3. **Type A Dispersal Bed where Q**

≤ 3000 litres per day
 >3000 litres per day

NOTE: Complete calculations for type of septic system being installed.

The proposed bed for this project will be: (enter 1A, 2B, etc as applicable)

Proposed elevation of base in relation to existing grade to be: mm Above grade Below grade

B: Absorption Trench

L= Length of distribution pipe (in meters) D= Daily design flow (in litres) T= Percolation Time of underlying soil

(1A) Under 8.7.3.1(2)				
Where L=QT/200				
Q	x	T	÷200	= L
<input style="width: 40px;" type="text"/>	x	<input style="width: 40px;" type="text"/>	÷200	= <input style="width: 40px;" type="text"/>

(1B) 8.7.3.1(3) With treatment unit as described in Table 8.6.2.2				
Where L=QT/300				
Q	x	T	÷300	= L
<input style="width: 40px;" type="text"/>	x	<input style="width: 40px;" type="text"/>	÷300	= <input style="width: 40px;" type="text"/>

Length (in meters)

Minimum	Proposed
<input style="width: 80px;" type="text"/>	<input style="width: 80px;" type="text"/>

C. Filter Bed

Effective Surface area:

a) If Q ≤ 3000 litres/day

A = Q/75

Q	÷ 75	A (m ²)
<input style="width: 80px;" type="text"/>		<input style="width: 80px;" type="text"/>

b) If Q > 3000 litres/day

A = Q/50

Q	÷ 50	A (m ²)
<input style="width: 80px;" type="text"/>		<input style="width: 80px;" type="text"/>

Surface Area (m²)

Minimum	Proposed
<input style="width: 80px;" type="text"/>	<input style="width: 80px;" type="text" value="0"/>

C. Filter Bed - continued..

c) Where level II, III, IV treatment unit used as described in **Table 8.6.2.2.**

$$A = Q/100$$

Q	÷ 100	A (m ²)

Surface Area (m ²)	
Minimum	Proposed

For a), b) or c): If "A" (area) of effective surface area is greater than 50m2:

How many cells are to be installed?

What is the size of each cell?

d) **Filter Medium Base Area:**

$$A = QT/850$$

Q	x	T	÷ 850	A		<input style="width: 30px; height: 20px;" type="text"/>

Base Area (m ²)	
Minimum	Proposed

D. Loading Rate (fill area) from Table 8.7.4.1 of the Building Code (if applicable)

**Loading Rates (LR) for
Fill-based/Absorption Trenches and Filter Beds**

If the Percolation Time of Soil (T) in minutes per cm is:	Loading Rate (LR) (L/m ²)/per day
between 1 and 20	10
between 20 and 35	8
between 35 and 50	6
greater than 50	4

Enter loading rate below. Divide "Q" by corresponding loading rate (LR) to get the Loading Area.

Q	÷	LR	=	Loading Area (LA)

Schedule 2C: Class 4 Sewage System Calculations - cont'd.

E. Type A Dispersal Bed

Q = Daily design flow (in litres) T = Percolation Time of underlying soil A = Area (in m²)

- (i) **Stone Layer area:** (Formulas in (i) and (ii) are based on the value of "Q" and will OR will not calculate based "Type of filter bed chosen on page 8.)

If Q ≤ 3,000 litres/day

$$A = Q/75$$

Q	÷	75	=	A
0	÷	75	=	0.0

(ii) If Q ≥ 3,000 litres/day

$$A = Q/50$$

Q	÷	50	=	A
0	÷	50	=	0.0

- (iii) **Sand Layer where T ≤ 15**

$$A = \frac{QT}{850}$$

Q	x	T	÷	850	=	A
0	x	0	÷	850	=	0.0

- (iv) **Sand Layer area where T > 15**

shall,

- a) extend to at least 15m beyond the perimeter of the treatment unit, or distribution pipes if utilized, in any direction that the effluent entering the soil will move horizontally and,
- b) have an area that is not less than the value determined by the following formula,

$$A = \frac{QT}{400}$$

Q	x	T	÷	400	=	A
0	x	0	÷	400	=	0.0

F. Pump and Siphons (if applicable)

Distribution Pipe

L = Total length of distribution pipe in the leaching bed

V = Effluent volume (in litres) pumped.

Select diameter (in inches) of distribution pipe (eg. 3 or 4) Enter pipe length (L)

				Minimum	Proposed
75mm (3") diameter distribution pipe	V =	3.3 x	<input style="width: 50px;" type="text"/> (L) =	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
100 mm (4") diameter distribution pipe	V =	5.9 x	<input style="width: 50px;" type="text"/> (L) =	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>

A Dose Pump is required if total distribution pipe is 150m or more

Dose Pump required? Yes No

G. Site Plan

- Locate and show horizontal distance from sewage system to all proposed or existing structures, driveway, property lines, swimming pools.
- Locate and show clearance to all wells (including those on adjacent properties)
- Water courses (eg. lakes, rivers, ponds, etc.)
- Swales, slopes and changes in grade
- North (facing) arrow
- Tank and pump chamber sizes (in litres) and name of manufacturer
- Base, contact and loading areas (in square meters)
- Length of distribution pipe (in meters)

Attach septic site plan (incorporating all applicable elements as noted above) to application.

H. Declaration and Acknowledgement

1. I acknowledge that any deviation from the approved plans and specifications after the permit is issued is a violation of the Building Code Act and agree to consult with a building inspector before making any changes from the approved plans.
2. I agree to comply with the provisions of Municipal Building and Zoning By-laws.
3. I agree that, neither the granting of a permit, nor approval of the plans and specifications, nor inspections made by Township of Springwater Inspectors during work on the sewage system, shall relieve me from the responsibility for carrying out the work in accordance with the Building Code Act, as amended, and the Regulations made thereunder.
4. I declare that the information contained herein is in every respect, fully and truthfully stated to the best of my knowledge and belief.
5. I acknowledge that I will provide a pit analysis of filter medium where applicable.
6. I acknowledge, that, prior to backfilling, the stone layer shall be protected by covering it with an untreated building paper or a permeable geo-textile fabric.
7. I acknowledge that a leaching bed shall not be covered with any material having a hydraulic conductivity less than 0.01 m/day.
8. I acknowledge that I will operate (if owner), or advise owner (if contractor) of the operation and maintenance required on the septic system.
9. I acknowledge that I will provide a Maintenance Contract for a Treatment Unit and Class-5 Holding Tank.
- 10 I acknowledge that should a temporary entrance be required to construct this septic system, I will obtain such permit as is required by the Public Works Department (705-728-4784 Ext 2036), prior to commencing construction.

Submitted by:

Name (please print)

Signature of Owner/Agent

Date

I. For Office Use Only

NOTES:

Name (please print)

Signature of Inspector

Date Approved